

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method of determining the germination vigour, ~~and/or the storage capability, or the germination vigour and the storage capacity~~ of a seed batch, ~~characterized in that it comprises~~ comprising quantifying, on a sample of seeds taken from said batch, ~~the one or more~~ proteins recognized by at least one anti-L-isoaspartyl methyltransferase ~~antibodies~~ antibody directed against a region of said ~~protein~~ one or more proteins, wherein the region is selected from the group consisting of

a region defined by the sequence: RYVPLTSRX<sub>1</sub>X<sub>2</sub>QLX<sub>3</sub> (SEQ ID NO: 1),

wherein X<sub>1</sub> is E, V or S, X<sub>2</sub> is A or E, and X<sub>3</sub> is R, G or Q,

a region defined by the sequence: QX<sub>4</sub>LX<sub>5</sub>VX<sub>6</sub>DKX<sub>7</sub>X<sub>8</sub>DGSX<sub>9</sub>X<sub>10</sub>X<sub>11</sub> (SEQ ID NO: 2),

wherein X<sub>4</sub> is D or E, X<sub>5</sub> is Q or K, X<sub>6</sub> is V or I, X<sub>7</sub> is N or S, X<sub>8</sub> is S, E or A,

X<sub>9</sub> is either a dipeptide selected from the group consisting of IS, VS, VT and

TS, or a peptide bond, X<sub>10</sub> is I or V, and X<sub>11</sub> is K, Q or R,

a region defined by the sequence: QDLQVVDKNSDGSVSIK (SEQ ID NO: 3), and

a region defined by the sequence: RYVPLTSREAQLR (SEQ ID NO: 5)

~~defined by the sequence (1): RYVPLTSRX<sub>1</sub>X<sub>2</sub>QLX<sub>3</sub> (SEQ ID NO: 1), in which X<sub>1</sub> represents E, V or S, X<sub>2</sub> represents A or E, and X<sub>3</sub> represents R, G or Q.~~

Claim 2 (Currently Amended): The method as claimed in claim 1, ~~characterized in that the quantification of the L-isoaspartyl methyltransferase is carried out using an~~ wherein the region is the region defined by the sequence: RYVPLTSRX<sub>1</sub>X<sub>2</sub>QLX<sub>3</sub> (SEQ ID NO: 1), wherein X<sub>1</sub> is E, V or S, X<sub>2</sub> is A or E, and X<sub>3</sub> is R, G or Q ~~anti-L-isoaspartyl methyltransferase antibody chosen from:~~

~~an anti-L-isoaspartyl methyltransferase antibody directed against a region of said protein defined by the sequence (I);~~

~~an anti-L-isoaspartyl methyltransferase antibody directed against a region of said protein defined by the sequence (II):~~

~~QX<sub>4</sub>LX<sub>5</sub>VX<sub>6</sub>DKX<sub>7</sub>X<sub>8</sub>DGSX<sub>9</sub>X<sub>10</sub>X<sub>11</sub> (SEQ ID NO: 2), in which~~

~~X<sub>4</sub> represents D or E, X<sub>5</sub> represents Q or K, X<sub>6</sub> represents V or I, X<sub>7</sub> represents N or S, X<sub>8</sub> represents S, E or A, X<sub>9</sub> represents either a dipeptide chosen from IS, VS, VT and TS, or a peptide bond, X<sub>10</sub> represents I or V, and X<sub>11</sub> represents K, Q or R.~~

Claim 3 (Currently Amended): The method of claim 1, wherein the region is the region defined by the sequence:

QX<sub>4</sub>LX<sub>5</sub>VX<sub>6</sub>DKX<sub>7</sub>X<sub>8</sub>DGSX<sub>9</sub>X<sub>10</sub>X<sub>11</sub> (SEQ ID NO: 2),

wherein X<sub>4</sub> is D or E, X<sub>5</sub> is Q or K, X<sub>6</sub> is V or I, X<sub>7</sub> is N or S, X<sub>8</sub> is S, E or A, X<sub>9</sub> is either a dipeptide selected from the group consisting of IS, VS, VT and TS, or a peptide bond, X<sub>10</sub> is I or V, and X<sub>11</sub> is K, Q or R as claimed in claim 2, characterized in that use is made of an anti-L-isoaspartyl methyltransferase antibody chosen from:

~~an antibody directed against a peptide of sequence QDLQVVDKNSDGSVSIK (SEQ ID NO: 3);~~

~~an antibody directed against a peptide of sequence RYVPLTSREAQLR (SEQ ID NO: 5).~~

Claim 4 (Currently Amended): The An anti-L-isoaspartyl methyltransferase antibody as defined in either of claims 2 and 3 selected from the group consisting of

an anti-L-isoaspartyl methyltransferase antibody directed against a protein region defined by the sequence: RYVPLTSRX<sub>1</sub>X<sub>2</sub>QLX<sub>3</sub> (SEQ ID NO: 1), wherein X<sub>1</sub> is E, V or S, X<sub>2</sub> is A or E, and X<sub>3</sub> is R, G or Q,

an anti-L-isoaspartyl methyltransferase antibody directed against a protein region defined by the sequence: QX<sub>4</sub>LX<sub>5</sub>VX<sub>6</sub>DKX<sub>7</sub>X<sub>8</sub>DGSX<sub>9</sub>X<sub>10</sub>X<sub>11</sub> (SEQ ID NO: 2),

wherein X<sub>4</sub> is D or E, X<sub>5</sub> is Q or K, X<sub>6</sub> is V or I, X<sub>7</sub> is N or S, X<sub>8</sub> is S, E or A, X<sub>9</sub> is either a dipeptide selected from the group consisting of IS, VS, VT and TS, or a peptide bond, X<sub>10</sub> is I or V, and X<sub>11</sub> is K, Q or R,

an antibody directed against a protein region defined by the sequence:

QDLQVVDKNSDGSVSIK (SEQ ID NO: 3), and

an antibody directed against a protein region defined by the sequence:

RYVPLTSREAQLR (SEQ ID NO: 5).

Claim 5 (Currently Amended): A method of quantifying the L-isoaspartyl methyltransferase in plant material, ~~characterized in that it comprises~~ comprising bringing said plant material into contact with ~~an~~ the anti-L-isoaspartyl methyltransferase antibody as claimed in claim 4.

Claim 6 (Canceled).

Claim 7 (New): The method as claimed in claim 1, wherein the region is the region defined by the sequence: QDLQVVDKNSDGSVSIK (SEQ ID NO: 3).

Claim 8 (New): The method as claimed in claim 1, wherein the region is the region defined by the sequence: RYVPLTSREAQLR (SEQ ID NO: 5).